Climate Change and Human Health Literature Portal



Critical processes affecting Cryptosporidium oocyst survival in the environment

Author(s): King BJ, Monis PT

Year: 2007

Journal: Parasitology. 134 (Pt 3): 309-323

Abstract:

Cryptosporidium are parasitic protozoans that cause gastrointestinal disease and represent a significant risk to public health. Cryptosporidium oocysts are prevalent in surface waters as a result of human, livestock and native animal faecal contamination. The resistance of oocysts to the concentrations of chlorine and monochloramine used to disinfect potable water increases the risk of waterborne transmission via drinking water. In addition to being resistant to commonly used disinfectants, it is thought that oocysts can persist in the environment and be readily mobilized by precipitation events. This paper will review the critical processes involved in the inactivation or removal of oocysts in the terrestrial and aquatic environments and consider how these processes will respond in the context of climate change.

Source: http://dx.doi.org/10.1017/s0031182006001491

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Extreme Weather Event, Food/Water Quality, Solar Radiation, Temperature

Extreme Weather Event: Drought

Food/Water Quality: Pathogen

Geographic Feature: M

resource focuses on specific type of geography

Freshwater

Geographic Location: M

resource focuses on specific location

Global or Unspecified

Health Impact: M

specification of health effect or disease related to climate change exposure

Infectious Disease

Climate Change and Human Health Literature Portal

Infectious Disease: Foodborne/Waterborne Disease

Foodborne/Waterborne Disease: Cryptosporidiosis

Resource Type:

format or standard characteristic of resource

Review

Timescale: M

time period studied

Time Scale Unspecified